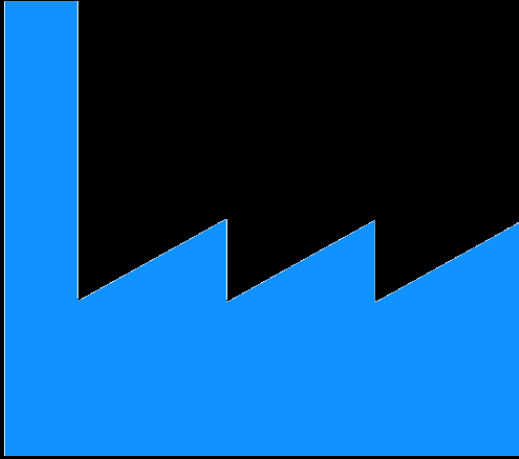


# energy

data driven energy intelligence for industry

Arnaud Legrand, CEO  
21-22 October, Berlin





6

315 360

3 153 6000 0000



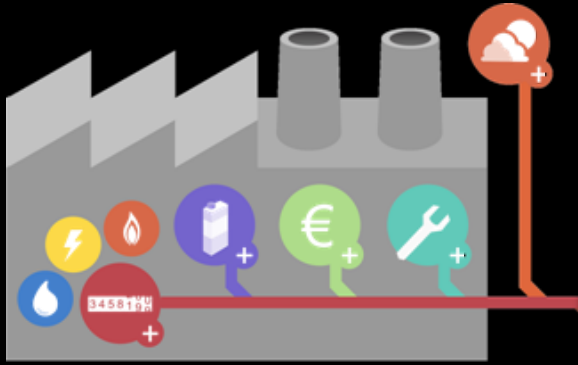


|    |          |          |   |    |     |       |        |       |       |       |       |      |     |          |          |          |    |     |       |        |        |       |       |       |      |    |          |          |          |    |     |       |        |        |       |       |       |      |   |
|----|----------|----------|---|----|-----|-------|--------|-------|-------|-------|-------|------|-----|----------|----------|----------|----|-----|-------|--------|--------|-------|-------|-------|------|----|----------|----------|----------|----|-----|-------|--------|--------|-------|-------|-------|------|---|
| 41 | 14/10/10 | 18:05:00 | 4 | 18 | 0   | 9700  | 11 700 | 875   | 1 050 | 975   | 2 240 | 1580 | 505 | 41       | 15/10/10 | 07:40:00 | S  | 7   | 0     | 9900   | 17 200 | 1 075 | 750   | 3 165 | 1985 | 0  | 41       | 15/10/10 | 07:40:00 | S  | 7   | 0     | 9900   | 17 200 | 1 075 | 750   | 3 165 | 1985 | 0 |
| 41 | 14/10/10 | 18:10:00 | 4 | 18 | 0   | 9700  | 9 000  | 825   | 975   | 800   | 2050  | 0    | 0   | 41       | 15/10/10 | 07:45:00 | S  | 7   | 100   | 10400  | 10 200 | 1 075 | 650   | 2 980 | 1970 | 0  | 41       | 15/10/10 | 07:45:00 | S  | 7   | 100   | 10400  | 10 200 | 1 075 | 650   | 2 980 | 1970 | 0 |
| 41 | 14/10/10 | 18:15:00 | 4 | 18 | 0   | 9600  | 8000   | 900   | 975   | 1 445 | 2010  | 720  | 0   | 41       | 15/10/10 | 07:50:00 | S  | 7   | 0     | 10900  | 16 200 | 1 050 | 600   | 2 515 | 1960 | 0  | 41       | 15/10/10 | 07:50:00 | S  | 7   | 0     | 10900  | 16 200 | 1 050 | 600   | 2 515 | 1960 | 0 |
| 41 | 14/10/10 | 18:20:00 | 4 | 18 | 0   | 9500  | 1 100  | 900   | 950   | 1 685 | 2400  | 590  | 41  | 15/10/10 | 07:55:00 | S        | 7  | 0   | 10700 | 2 800  | 1 100  | 650   | 3 225 | 1975  | 0    | 41 | 15/10/10 | 07:55:00 | S        | 7  | 0   | 10700 | 2 800  | 1 100  | 650   | 3 225 | 1975  | 0    |   |
| 41 | 14/10/10 | 18:25:00 | 4 | 18 | 100 | 10000 | 800    | 500   | 825   | 1 390 | 1610  | 0    | 41  | 15/10/10 | 08:00:00 | S        | 8  | 0   | 7400  | 400    | 775    | 625   | 2 090 | 1960  | 0    | 41 | 15/10/10 | 08:00:00 | S        | 8  | 0   | 7400  | 400    | 775    | 625   | 2 090 | 1960  | 0    |   |
| 41 | 14/10/10 | 18:30:00 | 4 | 18 | 0   | 9600  | 700    | 625   | 500   | 1 900 | 1975  | 0    | 41  | 15/10/10 | 08:05:00 | S        | 8  | 0   | 6800  | 1 000  | 650    | 675   | 420   | 1980  | 0    | 41 | 15/10/10 | 08:05:00 | S        | 8  | 0   | 6800  | 1 000  | 650    | 675   | 420   | 1980  | 0    |   |
| 41 | 14/10/10 | 18:35:00 | 4 | 18 | 0   | 10100 | 800    | 625   | 200   | 4 370 | 1955  | 0    | 41  | 15/10/10 | 08:10:00 | S        | 8  | 100 | 6900  | 1 200  | 675    | 675   | 405   | 2020  | 0    | 41 | 15/10/10 | 08:10:00 | S        | 8  | 100 | 6900  | 1 200  | 675    | 675   | 405   | 2020  | 0    |   |
| 41 | 14/10/10 | 18:40:00 | 4 | 18 | 0   | 10400 | 6 000  | 625   | 700   | 3 510 | 2025  | 490  | 41  | 15/10/10 | 08:15:00 | S        | 8  | 0   | 6800  | 1 200  | 625    | 625   | 420   | 2000  | 580  | 41 | 15/10/10 | 08:15:00 | S        | 8  | 0   | 6800  | 1 200  | 625    | 625   | 420   | 2000  | 580  |   |
| 41 | 14/10/10 | 18:45:00 | 4 | 18 | 100 | 10000 | 14 200 | 675   | 675   | 2 960 | 1940  | 0    | 41  | 15/10/10 | 08:20:00 | S        | 8  | 0   | 7900  | 10 700 | 650    | 675   | 1 620 | 2030  | 0    | 41 | 15/10/10 | 08:20:00 | S        | 8  | 0   | 7900  | 10 700 | 650    | 675   | 1 620 | 2030  | 0    |   |
| 41 | 14/10/10 | 18:50:00 | 4 | 18 | 0   | 9700  | 16 800 | 975   | 325   | 2 085 | 2015  | 500  | 41  | 15/10/10 | 08:25:00 | S        | 8  | 0   | 9900  | 18 100 | 1 000  | 700   | 2 840 | 2035  | 0    | 41 | 15/10/10 | 08:25:00 | S        | 8  | 0   | 9900  | 18 100 | 1 000  | 700   | 2 840 | 2035  | 0    |   |
| 41 | 14/10/10 | 18:55:00 | 4 | 18 | 0   | 10100 | 26 700 | 1 050 | 675   | 3 455 | 2035  | 635  | 41  | 15/10/10 | 08:30:00 | S        | 8  | 100 | 9500  | 11 200 | 1 050  | 800   | 3 255 | 1970  | 0    | 41 | 15/10/10 | 08:30:00 | S        | 8  | 100 | 9500  | 11 200 | 1 050  | 800   | 3 255 | 1970  | 0    |   |
| 41 | 14/10/10 | 19:00:00 | 4 | 19 | 0   | 9300  | 21 200 | 1 000 | 550   | 4 200 | 1975  | 0    | 41  | 15/10/10 | 08:35:00 | S        | 8  | 0   | 9400  | 15 900 | 1 075  | 1 350 | 4 275 | 1985  | 515  | 41 | 15/10/10 | 08:35:00 | S        | 8  | 0   | 9400  | 15 900 | 1 075  | 1 350 | 4 275 | 1985  | 515  |   |
| 41 | 14/10/10 | 19:05:00 | 4 | 19 | 0   | 10400 | 14 100 | 975   | 575   | 4 490 | 2005  | 630  | 41  | 15/10/10 | 08:40:00 | S        | 8  | 0   | 10200 | 11 500 | 1 075  | 700   | 3 270 | 1620  | 660  | 41 | 15/10/10 | 08:40:00 | S        | 8  | 0   | 10200 | 11 500 | 1 075  | 700   | 3 270 | 1620  | 660  |   |
| 41 | 14/10/10 | 19:10:00 | 4 | 19 | 100 | 8900  | 8 800  | 1 025 | 700   | 3 570 | 2005  | 0    | 41  | 15/10/10 | 08:45:00 | S        | 8  | 0   | 9800  | 14 400 | 1 025  | 750   | 4 965 | 2425  | 860  | 41 | 15/10/10 | 08:45:00 | S        | 8  | 0   | 9800  | 14 400 | 1 025  | 750   | 4 965 | 2425  | 860  |   |
| 41 | 14/10/10 | 19:15:00 | 4 | 19 | 0   | 11800 | 8 000  | 1 000 | 875   | 3 015 | 1935  | 0    | 41  | 15/10/10 | 08:50:00 | S        | 8  | 0   | 9600  | 9 400  | 1 075  | 650   | 4 315 | 1955  | 30   | 41 | 15/10/10 | 08:50:00 | S        | 8  | 0   | 9600  | 9 400  | 1 075  | 650   | 4 315 | 1955  | 30   |   |
| 41 | 14/10/10 | 19:20:00 | 4 | 19 | 0   | 9900  | 17 900 | 1 000 | 400   | 4 325 | 1980  | 545  | 41  | 15/10/10 | 08:55:00 | S        | 8  | 100 | 10200 | 6 900  | 1 075  | 725   | 4 780 | 1645  | 775  | 41 | 15/10/10 | 08:55:00 | S        | 8  | 100 | 10200 | 6 900  | 1 075  | 725   | 4 780 | 1645  | 775  |   |
| 41 | 14/10/10 | 19:25:00 | 4 | 19 | 0   | 8100  | 14 900 | 925   | 975   | 2 675 | 2050  | 0    | 41  | 15/10/10 | 09:00:00 | S        | 9  | 0   | 9700  | 300    | 825    | 975   | 2 380 | 2020  | 550  | 41 | 15/10/10 | 09:00:00 | S        | 9  | 0   | 9700  | 300    | 825    | 975   | 2 380 | 2020  | 550  |   |
| 41 | 14/10/10 | 19:30:00 | 4 | 19 | 100 | 11500 | 13 700 | 925   | 400   | 3 295 | 1960  | 120  | 41  | 15/10/10 | 09:05:00 | S        | 9  | 0   | 10600 | 10 700 | 1 800  | 1 525 | 4 315 | 2335  | 0    | 41 | 15/10/10 | 09:05:00 | S        | 9  | 0   | 10600 | 10 700 | 1 800  | 1 525 | 4 315 | 2335  | 0    |   |
| 41 | 14/10/10 | 19:35:00 | 4 | 19 | 0   | 7800  | 22 000 | 875   | 850   | 2 975 | 2010  | 615  | 41  | 15/10/10 | 09:10:00 | S        | 9  | 0   | 10700 | 14 500 | 3 750  | 900   | 4 150 | 2030  | 545  | 41 | 15/10/10 | 09:10:00 | S        | 9  | 0   | 10700 | 14 500 | 3 750  | 900   | 4 150 | 2030  | 545  |   |
| 41 | 14/10/10 | 19:40:00 | 4 | 19 | 0   | 8200  | 17 000 | 900   | 200   | 465   | 2060  | 450  | 41  | 15/10/10 | 09:15:00 | S        | 9  | 100 | 10200 | 12 000 | 4 000  | 625   | 3 260 | 1615  | 925  | 41 | 15/10/10 | 09:15:00 | S        | 9  | 100 | 10200 | 12 000 | 4 000  | 625   | 3 260 | 1615  | 925  |   |
| 41 | 14/10/10 | 19:45:00 | 4 | 19 | 0   | 6700  | 11 100 | 875   | 200   | 475   | 2000  | 0    | 41  | 15/10/10 | 09:20:00 | S        | 9  | 0   | 7500  | 12 700 | 3 200  | 925   | 4 770 | 2010  | 1270 | 41 | 15/10/10 | 09:20:00 | S        | 9  | 0   | 7500  | 12 700 | 3 200  | 925   | 4 770 | 2010  | 1270 |   |
| 41 | 14/10/10 | 19:50:00 | 4 | 19 | 100 | 6400  | 20 400 | 950   | 225   | 450   | 2000  | 0    | 41  | 15/10/10 | 09:25:00 | S        | 9  | 0   | 9600  | 7 400  | 4 400  | 1 450 | 4 305 | 2035  | 685  | 41 | 15/10/10 | 09:25:00 | S        | 9  | 0   | 9600  | 7 400  | 4 400  | 1 450 | 4 305 | 2035  | 685  |   |
| 41 | 14/10/10 | 19:55:00 | 4 | 19 | 0   | 5700  | 13 000 | 875   | 250   | 480   | 2030  | 540  | 41  | 15/10/10 | 09:30:00 | S        | 9  | 0   | 10600 | 6 100  | 2 975  | 675   | 5 455 | 1990  | 180  | 41 | 15/10/10 | 09:30:00 | S        | 9  | 0   | 10600 | 6 100  | 2 975  | 675   | 5 455 | 1990  | 180  |   |
| 41 | 14/10/10 | 20:00:00 | 4 | 20 | 0   | 2200  | 9 400  | 875   | 275   | 460   | 2010  | 555  | 41  | 15/10/10 | 09:35:00 | S        | 9  | 0   | 9300  | 8 700  | 700    | 650   | 2 795 | 2010  | 1195 | 41 | 15/10/10 | 09:35:00 | S        | 9  | 0   | 9300  | 8 700  | 700    | 650   | 2 795 | 2010  | 1195 |   |
| 41 | 14/10/10 | 20:05:00 | 4 | 20 | 0   | 5700  | 8 600  | 900   | 325   | 2 755 | 1995  | 650  | 41  | 15/10/10 | 09:40:00 | S        | 9  | 100 | 9700  | 8 800  | 1 125  | 675   | 3 855 | 2040  | 905  | 41 | 15/10/10 | 09:40:00 | S        | 9  | 100 | 9700  | 8 800  | 1 125  | 675   | 3 855 | 2040  | 905  |   |
| 41 | 14/10/10 | 20:10:00 | 4 | 20 | 100 | 8600  | 12 200 | 875   | 600   | 2 695 | 2035  | 595  | 41  | 15/10/10 | 09:45:00 | S        | 9  | 0   | 10000 | 8 300  | 1 125  | 625   | 4 735 | 2010  | 455  | 41 | 15/10/10 | 09:45:00 | S        | 9  | 0   | 10000 | 8 300  | 1 125  | 625   | 4 735 | 2010  | 455  |   |
| 41 | 14/10/10 | 20:15:00 | 4 | 20 | 0   | 9300  | 6 400  | 875   | 800   | 3 520 | 2020  | 885  | 41  | 15/10/10 | 09:50:00 | S        | 9  | 0   | 9900  | 8 900  | 1 125  | 650   | 4 265 | 2010  | 850  | 41 | 15/10/10 | 09:50:00 | S        | 9  | 0   | 9900  | 8 900  | 1 125  | 650   | 4 265 | 2010  | 850  |   |
| 41 | 14/10/10 | 20:20:00 | 4 | 20 | 0   | 9500  | 9 600  | 1 200 | 500   | 2 965 | 1995  | 590  | 41  | 15/10/10 | 09:55:00 | S        | 9  | 0   | 6900  | 13 400 | 1 100  | 775   | 4 605 | 2050  | 820  | 41 | 15/10/10 | 09:55:00 | S        | 9  | 0   | 6900  | 13 400 | 1 100  | 775   | 4 605 | 2050  | 820  |   |
| 41 | 14/10/10 | 20:25:00 | 4 | 20 | 0   | 9800  | 14 200 | 2 775 | 500   | 4 845 | 2040  | 765  | 41  | 15/10/10 | 10:00:00 | S        | 10 | 100 | 8400  | 9 800  | 1 175  | 775   | 3 405 | 2005  | 615  | 41 | 15/10/10 | 10:00:00 | S        | 10 | 100 | 8400  | 9 800  | 1 175  | 775   | 3 405 | 2005  | 615  |   |
| 41 | 14/10/10 | 20:30:00 | 4 | 20 | 0   | 9700  | 14 100 | 3 975 | 175   | 4 155 | 2005  | 590  | 41  | 15/10/10 | 10:05:00 | S        | 10 | 0   | 6900  | 15 000 | 1 125  | 975   | 4 170 | 2005  | 675  | 41 | 15/10/10 | 10:05:00 | S        | 10 | 0   | 6900  | 16 000 | 1 125  | 975   | 4 170 | 2005  | 675  |   |
| 41 | 14/10/10 | 20:35:00 | 4 | 20 | 100 | 9100  | 15 400 | 3 475 | 200   | 3 315 | 1995  | 590  | 41  | 15/10/10 | 10:10:00 | S        | 10 | 0   | 7100  | 10 300 | 1 150  | 800   | 4 360 | 2035  | 755  | 41 | 15/10/10 | 10:10:00 | S        | 10 | 0   | 7100  | 10 300 | 1 150  | 800   | 4 360 | 2035  | 755  |   |
| 41 | 14/10/10 | 20:40:00 | 4 | 20 | 0   | 9600  | 13 800 | 3 650 | 225   | 2 885 | 2035  | 605  | 41  | 15/10/10 | 10:15:00 | S        | 10 | 0   | 5800  | 15 600 | 1 125  | 1 300 | 4 135 | 2000  | 890  | 41 | 15/10/10 | 10:15:00 | S        | 10 | 0   | 5800  | 15 600 | 1 125  | 1 300 | 4 135 | 2000  | 890  |   |
| 41 | 14/10/10 | 20:45:00 | 4 | 20 | 0   | 9400  | 1 200  | 3 175 | 200   | 2 635 | 1565  | 0    | 41  | 15/10/10 | 10:20:00 | S        | 10 | 0   | 8700  | 10 300 | 1 125  | 550   | 3 780 | 2005  | 665  | 41 | 15/10/10 | 10:20:00 | S        | 10 | 0   | 8700  | 10 300 | 1 125  | 550   | 3 780 | 2005  | 665  |   |
| 41 | 14/10/10 | 20:50:00 | 4 | 20 | 0   | 9300  | 1 300  | 1 550 | 275   | 3 080 | 2345  | 0    | 41  | 15/10/10 | 10:25:00 | S        | 10 | 100 | 6000  | 14 800 | 1 150  | 900   | 4 420 | 2040  | 765  | 41 | 15/10/10 | 10:25:00 | S        | 10 | 100 | 6000  | 14 800 | 1 150  | 900   | 4 420 | 2040  | 765  |   |
| 41 | 14/10/10 | 20:55:00 | 4 | 20 | 100 | 8900  | 1 300  | 1 975 | 250   | 2 975 | 2045  | 655  | 41  | 15/10/10 | 10:30:00 | S        | 10 | 0   | 6800  | 19 000 | 1 125  | 1 775 | 4 005 | 2015  | 555  | 41 | 15/10/10 | 10:30:00 | S        | 10 | 0   | 6800  | 19 000 | 1 125  | 1 775 | 4 005 | 2015  | 555  |   |
| 41 | 14/10/10 | 21:00:00 | 4 | 21 | 0   | 8700  | 2 800  | 2 275 | 275   | 3 640 | 1935  | 0    | 41  | 15/10/10 | 10:35:00 | S        | 10 | 0</ |       |        |        |       |       |       |      |    |          |          |          |    |     |       |        |        |       |       |       |      |   |





**200 Mds €**



data



energy manager



Rechercher ...



ACCUEIL

JOURNAL DE BORD

MONITORING

Indicateurs

Commentaires

DIAGNOSTIC

MANAGEMENT

Actualités

**Conférence** usine du futur  
2020 à venir !

le 23 mars 2014

**Notre baromètre IAA 2013**  
disponible !  
le 12 mai 2014

Usine de Rennes

Semaine 39 : du 23 au 27 septembre

SEMAINE DERNIÈRE

14 920 kWh

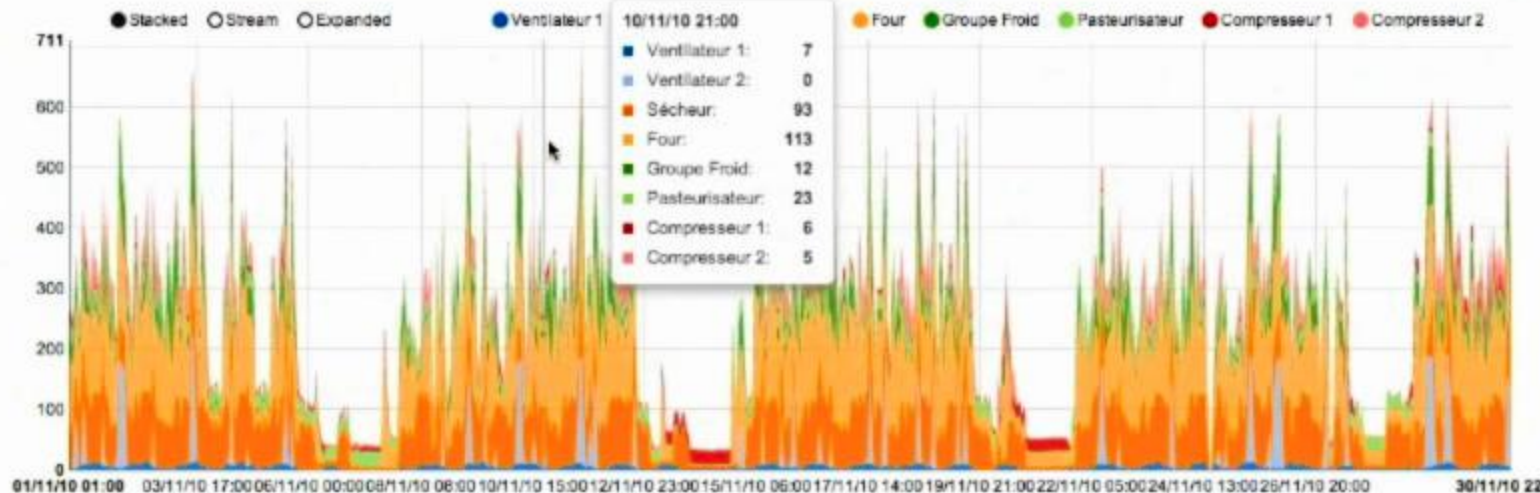


SEPTEMBRE

54 300 kWh



## &gt; Consommation électrique des machines (kWh / j)



## &gt; Consommation (kWh)

5

records per page



| Date | Heure | Vent. 1 | Sécheur | Four | Vent. 2 | Groupe F. | Pasteu. | Comp. 1 | Comp. 2 |
|------|-------|---------|---------|------|---------|-----------|---------|---------|---------|
|------|-------|---------|---------|------|---------|-----------|---------|---------|---------|

## &gt; Commentaires

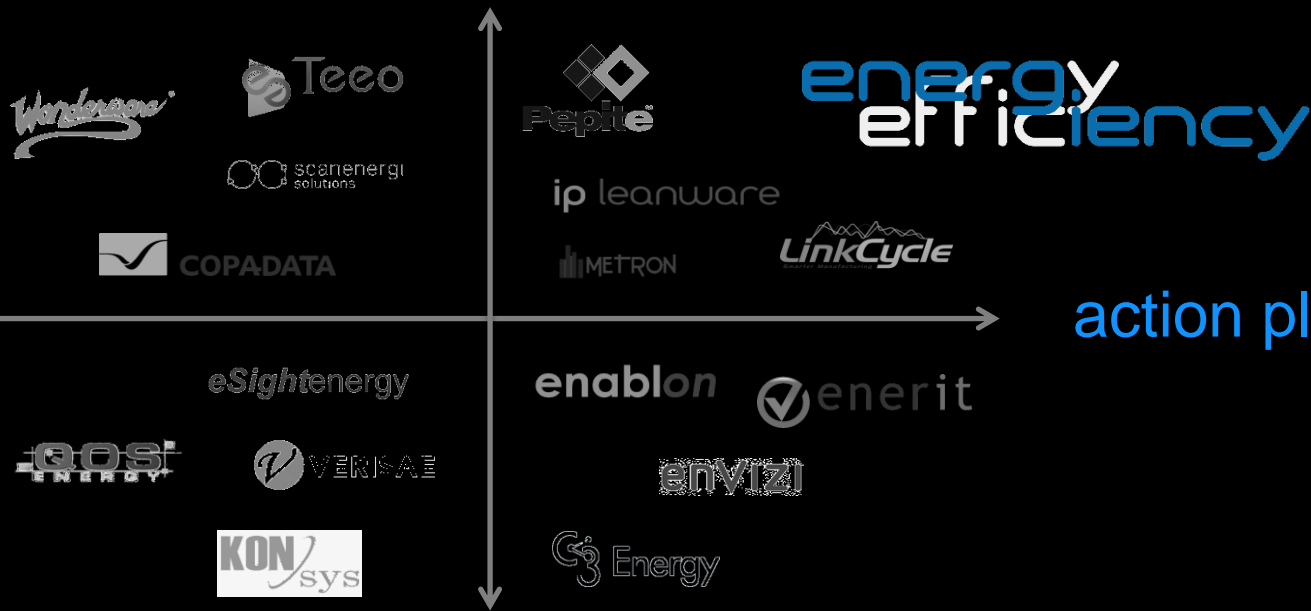


**Arnaud Legrand** Le 25 septembre 2013 à 11h02  
Pourquoi l'atelier de pasteurisation augmente alors que les 2 autres





industry



generalists

energy  
efficiency

31  
↓  
100 t



UPE

68.04 kV



TETP



CONCOURS  
ÉNERGIE INTELLIGENTE 2013

ENERGIENCY

Lauréat Prix de l'innovation au service de la relation client



Liberté • Égalité • Fraternité  
RÉPUBLIQUE FRANÇAISE

MINISTÈRE DE  
L'ENSEIGNEMENT  
SUPÉRIEUR ET DE  
LA RECHERCHE

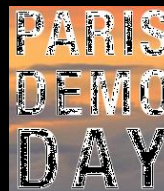


inn&connect

STARTWEST



TROPHÉES  
DE LA TRANSITION  
ÉNERGÉTIQUE  
2015





Erwan Daubert



UNIVERSITÉ DE  
RENNES 1 *Inria*  
CTO



COO

sébastien duburque



BNP PARIBAS

CEO



Arnaud Legrand



VP Sales



François Ducorney



start

monitoring

or

master

monitoring  
assessment

or

performance

monitoring  
assessment  
action plans

# meters

2018

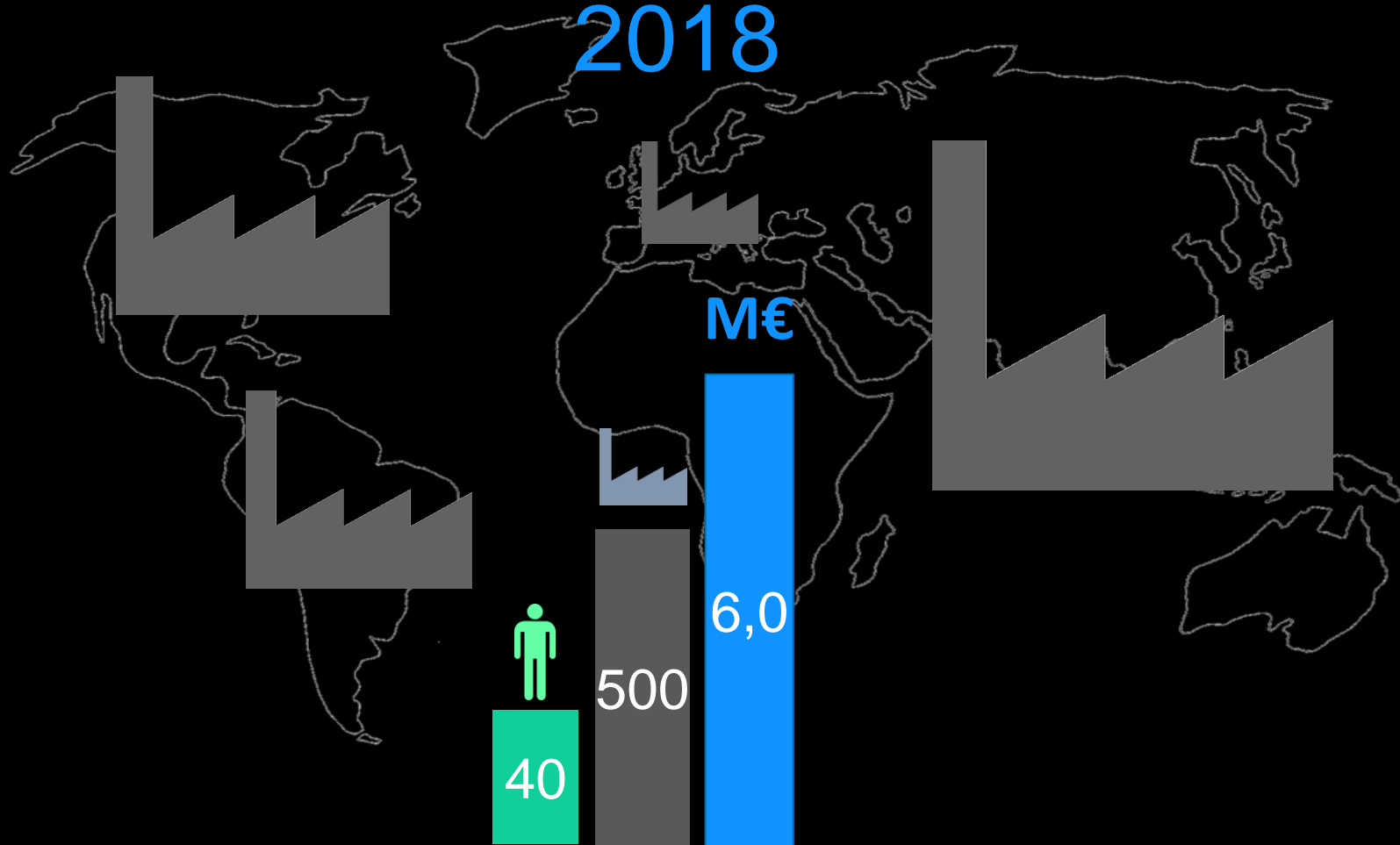
M€



40

500

6,0







# energy efficiency

data driven energy intelligence for industry